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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,749	04/19/2001	Arthur Miles Gilbert	END9-2000-0116US1	9339

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EXAMINER	
KLIMACH, PAULA W	

ART UNIT	PAPER NUMBER
2135	

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DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/838,749	GILBERT ET AL.	
	Examiner	Art Unit	
	Paula W. Klimach	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/05 has been entered.

Claim Rejections - 35 USC § 103

Claim 1-7 and 10-16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (6,405,364 B1) in view of Alsberg (4,672,572).

In reference to claim 7, Bowman-Amuah discloses a system and method for building systems in a development architecture framework wherein security is integrated into the solution (abstract and fig. 2), the steps of the method comprising: identifying the security threats to the solution (column 18 lines 30-36); determining the security properties of the overall solution (column 49 line 66 to column 50 lines 53), Bowman-Amuah lists the properties provided by the components of the overall security solution; assigning selected security properties for the overall solution to components of the solution (column 124 lines 33-35), since the system requires security through out the system and therefore security properties need to be embedded in components of the solution; enumerating security requirements for infrastructure, components and operations (column 50 line 54 to column 51 lines 14); developing integrity requirements (column 18 lines 32-36).

Although Bowman-Amuah does not disclose creating a functional technology diagram, Bowman-Amuah does disclose documenting the process (column 17 lines 64-67), which performs the function of the functional technology diagram.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the functional technology diagrams. One of ordinary skill in the art would have been motivated to do this because functional requirement diagrams capture the intended behavior of the system as shown in the documentation of the process that indicates the intended behavior; information that can later be used for testing.

Bowman-Amuah does not expressly disclose the security subsystem that includes an audit subsystem, an integrity subsystem, and an information flow control subsystem.

Alsberg discloses a protector device for enhancing security (abstract). The system includes an audit subsystem (column 6 lines 33-65), an integrity subsystem (column 7 lines 1-10), and an information flow control subsystem (column 8 lines 13-63).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include audit subsystem, integrity subsystems, and information flow control subsystems as in Alsberg in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because auditing potentially sensitive material, integrity subsystems, and controlling the information flow would increase the security of the system.

Bowman-Amuah discloses a system and method for building systems in a development architecture framework wherein security is integrated into the solution; however the security framework of Bowman-Amuah does not disclose using a baseline of a security model comprising a plurality of interrelated and interdependent security subsystems.

Perona discloses a system that performs rule checks in a two-way manner, restrictions such as licensing and source restrictions may be placed not only on system modules, but also on the applications using the security to be achieved (abstract). Therefore the modules of Perona include security properties in terms of a plurality of interconnected and interdependent security subsystems (column 4 lines 20-58 in combination of column Fig. 5).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to create a plurality of interconnected and interdependent security subsystems as in Perona in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because it would enable higher levels of security.

In reference to claim 1, Bowman-Amuah discloses a system and method for building systems in a development architecture framework wherein security is integrated into the solution (abstract and fig. 2). The system for analyzing a solution including a plurality of components comprising: a first system, which identifies the security threats for the solution (column 18 lines 30-36); a second system, which determines the security properties and functions of the overall solution (column49 line 66 to column 50 line 53); a third system which is coupled to the second system and which allocates security properties to the components of the solution based upon the selected functions which are derived from the nature and number of the security subsystems within the solution (column 51 lines 1-25); a fourth system which is coupled to the third system for allocating the security properties to the components of the solution and which identifies functional requirements for the components, in terms of the Common Criteria, in order to comply with the security properties of the component allocated by the third system (column 124 lines 33-35);

Bowman-Amuah does not expressly disclose the system documenting the requirements for the security component, however Bowman-Amuah does discloses documentation of the process (column 17 lines 64-67), wherein the process satisfies the requirements the requirements and the process are related matter.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to document the requirements for the security component. One of ordinary skill in the art would have been motivated to do this because information that can later be used for testing wherein tests would be tailored to verify that the documented requirements have been satisfied.

Bowman-Amuah does not expressly disclose the security subsystem that includes an audit subsystem, an integrity subsystem, and an information flow control subsystem.

Alsberg discloses a protector device for enhancing security (abstract). The system includes an audit subsystem (column 6 lines 33-65), an integrity subsystem (column 7 lines 1-10), and an information flow control subsystem (column 8 lines 13-63).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include audit subsystem, integrity subsystems, and information flow control subsystems as in Alsberg in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because auditing potentially sensitive material, integrity subsystems, and controlling the information flow would increase the security of the system.

Bowman-Amuah discloses a system and method for building systems in a development architecture framework wherein security is integrated into the solution; however the security

framework of Bowman-Amuah does not disclose using a baseline of a security model comprising a plurality of interrelated and interdependent security subsystems.

Perona discloses a system that performs rule checks in a two-way manner, restrictions such as licensing and source restrictions may be placed not only on system modules, but also on the applications using the security to be achieved (abstract). Therefore the modules of Perona use a baseline of a security model comprising a plurality of interrelated and interdependent security subsystems (column 4 lines 20-58 in combination of column Fig. 5).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to create a plurality of interconnected and interdependent security subsystems as in Perona in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because it would enable higher levels of security.

In reference to claim 2, wherein the second system, which identifies security properties of the overall solution, includes a component that uses standard security subsystems for identifying security properties (column 49 line 66 to column 50 lines 53).

In reference to claim 3 wherein the standard criteria for identifying security properties includes a system which maps functions of standard security subsystems to an ISO standard 15408 also known as Common Criteria.

Although Bowman-Amuah discloses the use of standards, Bowman-Amuah does not expressly disclose the use of industrial standards.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use industrial standards. One of ordinary skill in the art would have been

motivated to do this because it would make the device compatible with other devices in the industry.

In reference to claim 4, wherein the system further includes a system that documents the solution and the security assumptions using a solution design security methodology (column 2 lines 30-43).

In reference to claims 5 and 11-12, wherein the system further provides integrity assurance requirements using a standard set of criteria.

Alsberg discloses the integrity subsystem providing integrity requirement (part 76 Fig. 5)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide the integrity requirements as in Alsberg in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because the audit subsystem gives a view of the system which allows the system to be analyzed and changed to make it more secure.

In reference to claim 6 wherein the standard set of criteria are in accordance with ISO 15408.

Although Bowman-Amuah discloses the use of standards, Bowman-Amuah does not expressly disclose the use of industrial standards.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use industrial standards. One of ordinary skill in the art would have been motivated to do this because it would make the device compatible with other devices in the industry.

In reference to claim 10, wherein the method further includes the step of documenting the solution environment and security assumptions and using the environment and security assumptions in developing the security properties of the overall solution (column 17 lines 64-67).

In reference to claim 13 wherein the step of determining the security properties of the overall solution includes the step of using the Common Criteria of ISO Standard 15408.

Although Bowman-Amuah discloses the use of standards, Bowman-Amuah does not expressly disclose the use of industrial standards.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use industrial standards. One of ordinary skill in the art would have been motivated to do this because it would make the device compatible with other devices in the industry.

In reference to claims 14-15 wherein the step of using industry standard security criteria includes the step of using Common Criteria, which conforms to ISO Standard 15408.

Although Bowman-Amuah discloses the use of standards, Bowman-Amuah does not expressly disclose the use of industrial standards.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use industrial standards. One of ordinary skill in the art would have been motivated to do this because it would make the device compatible with other devices in the industry.

In reference to claim 16, wherein the step of enumerating security requirements for infrastructure components and operations includes the step of identifying, enumerating and

describing a number of standard security subsystems that in total represent the security function of the solution (column 49 line 66 to column 50 lines 53).

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah in view of Alsberg as applied to claim 7 above, and further in view of Leighton et al (5,519,778).

In reference to claim 8, Bowman-Amuah does not disclose ranking the security threats to the solution and considering the biggest threats to the security.

Leighton discloses categorizing (ranking) the security levels and therefore threats (column 6 lines 36-45).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to categorize the security levels as in Leighton in the system of Bowman-Amuah. One of ordinary skill in the art would have been motivated to do this because increasing security can reduce the performance of the system therefore by using less security for threats that are considered lower security increases in performance can be achieved.

In reference to claim 9, Bowman-Amuah does not disclose the step of ranking the security threats to the solution includes the step of doing less for security threats not considered substantial threats to the solution.

Leighton discloses a hierarchy of security protection and therefore grading security needs (column 6 lines 37-67)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to categorize the security levels as in Leighton in the system of Bowman-Amuah.

One of ordinary skill in the art would have been motivated to do this because increasing security can reduce the performance of the system therefore by using less security for threats that are considered lower security increases in performance can be achieved.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jablon 5,421,006

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The 2100 Tech center will move to Carlyle in October 2004. The new telephone number for the receptionist is (571) 272-2100. The examiner's new telephone number will be (571) 272-3854.

PWK
Thursday, February 02, 2006

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100